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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,876	07/30/2001	Brett B. Bonner	SYNER-176XX	2432

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EXAMINER	
FAROOQ, MOHAMMAD O	

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/918,876	BONNER ET AL.	
	Examiner	Art Unit	
	Mohammad O. Farooq	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/4/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Arrowood et al. U.S. Pat. No. 4,827,411.

2. As to claim 1, Arrowood et al. teach system comprising:

a plurality of network devices, each of said plurality of network devices communicably coupled to at least one other one of said plurality of network devices via a network, each one of said plurality of network devices including a local database, wherein said local databases in said plurality of network devices collectively comprise a distributed database (fig. 1; abstract);

a first one of said plurality of said network devices operative to store predetermined network configuration information and an associated timestamp (i.e. timer) in its local database and being further operative to transmit a first message including said predetermined network configuration information and said timestamp over said network for storage in at least one other local database in another one of said network devices (col. 3, lines 25-62); and

at least one network device other than said first one of said plurality of network devices being operative to receive said predetermined network configuration information and to store said information within its respective local database (col. 3, lines 25-62; col. 8, lines 13-31).

3. As to claim 2, Arrowood et al. tech system wherein said at least one network device other than said first one of said plurality of network devices is further operative to transmit a second message over said network indicating that it has stored the predetermined network configuration information within its local database (col. 8. lines 13-31; col. 3, lines 25-62).

4. As to claim 3, Arrowood et al. teach system wherein said at least one network device other than said first one of said plurality of network devices is operative to store said predetermined network configuration within its local database only if it has at least one predetermined characteristic in common with said first one of said network devices (inherent; col. 3, lines 25-62; fig. 1).

5. As to claim 4, Arrowood et al. teach system wherein said at least one network device other than said first one of said plurality of network devices is further operative to transmit a second message over said network indicating that it has stored the predetermined network configuration information within its local database (inherent; abstract; col. 3, liens 25-62).

6. As to claim 5, Arrowood et al. teach system wherein said first one of said plurality of network devices is further operative to transmit a third message (inherent since TDU messages are broadcasted repeatedly) to said other ones of said network devices requesting that the predetermined network configuration information be stored within each recipients local database in the event said first one of said network devices does not receive said second message within a predetermined interval following transmission of said first message, wherein said third message comprises a request to store the predetermined network configuration information within the local database of each one of said network device that receives the third message irrespective of whether the respective receiving network device has said at least one predetermined characteristic in common with said first one of said plurality of network devices (col. 9, lines 13-38; col. 3, lines 25-62).

7. As to claim 6, Arrowood et al. teach system wherein a second one of said network devices being operative to transmit a retrieval request over said network for retrieval of said predetermined network configuration, wherein at least one of said network devices that include said network management information within its respective local database is operative in response to said request to transmit said network management information and the associated timestamp over said network to said other ones of said network devices (col. 3, lines 47-62; col. 9, lines 13-38).

8. As to claim 7, Arrowood et al. teach system wherein at least one of said network devices other than said first one of said network devices is operative to store in the respective local database said predetermined network configuration information received at the respective network device in the event:

(a) said network management information received at the respective network device is not included within the database for that network device (i.e. when a device becomes obsolete; col. 5, lines 40-63); or

(b) a version of the information received at the respective network device is included within the database for the receiving network device but the timestamp for the received information is more recent than the timestamp for said version stored at said receiving device (i.e. timer is reset to maximum value; col. 9, lines 13-38).

9. As to claim 8, Arrowood et al. teach system wherein at least one of said network devices other than said first one of said network devices is operative to:
Identify whether the respective network device is storing a version of the predetermined network configuration information within its respective local database; and
In the event the respective network device is storing a version of the predetermined network configuration information within its local database:

(a) store in the local database the received predetermined network configuration information in the event the timestamp associated with the received predetermined network configuration information is more recent than the timestamp associated with the corresponding predetermined network configuration information within the local database (col. 9, lines 13-38); and

(b) transmit for receipt by said other ones of said network devices an update message that includes the predetermined network configuration information and the associated timestamp contained within the local database in the event the timestamp associated with the predetermined network configuration information stored within the local database is more recent that the timestamp associated with the received predetermined network configuration information (col. 3, lines 47-62; col. 9, lines 13-38).

10. As to claim 9, Arrowood et al. teach system wherein said first message includes a key and a value wherein said key comprises an identify a parameter and said value comprises data associated with said parameter (i.e. information in different records and fields; col. 3, lines 25-62).

11. As to claim 10, Arrowood et al. teach method comprising the steps of:

including a local database in each one of a plurality of communicably coupled network devices, wherein said local databases in said network devices collectively comprise a distributed database (fig. 1; abstract);

at a first one of said network devices, storing predetermined network configuration information and an associated timestamp (i.e. timer) within the respective local database and transmitting a first message including said predetermined network configuration information for receipt by at least one other network device (col. 3, lines 25-62); and

storing said predetermined network configuration information and said timestamp in the local database of each one of said other network devices in the event the respective network devices have a message parameter that is common to a corresponding message parameter within said first one of said network devices (col. 3, lines 25-62; col. 8, lines 13-31).

12. As to claim 16, Arrowood et al. teach system comprising:

means for storing information in a local database in each one of a plurality of communicably coupled network devices wherein said local databases in said network devices collectively comprise a distributed database (fig. 1; abstract);

at a first one of said network devices, means for storing predetermined network configuration information and an associated timestamp (i.e. timer) within the respective local database and transmitting a first message including said predetermined network configuration information for receipt by at least one other network device (col. 3, lines 25-62); and

means for storing said predetermined network configuration information and said timestamp in the local database of each one of said other network devices in the event the respective network devices have a message parameter that is common to a corresponding message parameter within said first one of said network devices (col. 3, lines 25-62; col. 8, lines 13-31).

13. Claims 11-14 are method claims of apparatus claims 2, 6, 7 and 3. Arrowood et al. teach apparatus as set forth in claims 2,6,7 and 3. Therefore, Arrowood et al. also teach method as set forth in claims 11-14.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arrowood et al. U.S.Pat. No. 4,827,411 in view of Lomet, U.S.Pat. No. 5,870,763.

15. As to claim 15, Arrowood et al. teach method wherein includes a first state and a second state (i.e. local node and remote node; col. 3, lines 47-62).

Arrowood does not teach volatile and non-volatile memory. Lomet teaches volatile and non-volatile memory (col. 1, lines 53-65). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Arrowood et al. and Lomet because that would provide database which persists in the event of a crash and makes recovery of data possible (col. 2, lines 5-15).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (571) 272-4144. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Mohammad O. Farooq
February 16, 2005